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DT05 Rec'd PCT/PTO 0 8 DEC 2004

PATENT

Attorney Docket No. 10354*1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
John R. HUMPHREY et al.)	
)	Group Art Unit: Unassigned
Serial No.: Unassigned)	
)	Examiner: Unassigned
Filed: December 8, 2004)	
)	
For: HARDWARE IMPLEMENTATION))	
OF THE PSEUDO-SPECTRAL)	
TIME-DOMAIN METHOD)	

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO-1449. This Information Disclosure Statement is being filed concurrently with the above-referenced application. Copies of the listed documents are provided herewith. Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached PTO-1449.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute

"prior art" under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 03-2775.

Respectfully submitted,

CONNOLLY BOVE LODGE & HUTZ LLP

Date: December 8, 2004

By: 

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	December 8, 2004
				First Named Inventor	John R. HUMPHREY et al.
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		5,680,515	10-21-1997	Barhen et al.	
		6,377,041	04-23-2002	Jones, Jr. et al.	
		6,507,804	01-14-2003	Hala et al.	
		6,512,789	01-28-2003	Mirfakhraei	
		6,584,138	06-24-2003	Neubauer et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
		A. Taflove, "Computer Electrodynamics: The Finite-Difference Time-Domain Method," pp. 68-70 (May 1995).	
		Q.H. Liu, "The PSTD Algorithm: A Time-Domain Method Requiring Only Two Cells Per Wavelength," <i>Microwave and Optical Technology Letters</i> , vol. 15, no. 3 (June 1997).	
		Q.H. Liu, "PML and PSTD Algorithm for Arbitrary Lossy Anisotropic Media," <i>IEEE Microwave and Guided Wave Letters</i> , vol. 9, no. 2 (Feb. 1999).	
		Q.H. Liu, "Large-Scale Simulations of Electromagnetic and Acoustic Measurements Using the Pseudospectral Time-Domain (PSTD) Algorithm," <i>IEEE Transactions on Geoscience and Remote Sensing</i> , vol. 37, no. 2 (March 1999).	
		Y.F. Leung et al., "Pseudospectral Time-Domain (PSTD) Method With Unsplit-Field PML," <i>Microwave and Optical Technology Letters</i> , vol. 22, no. 4 (Aug. 1999).	
		Q. Li et al., "Comparison Study Of The PSTD And FDTD Methods For Scattering Analysis,"	

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Examiner Signature		Date Considered	
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PTO/SB/08A (10-01)

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	10354*1

		<i>Microwave and Optical Technology Letters</i> , vol. 25, no. 3 (May 2000).	
		W.K. Leung et al., "Transformed-Space Nonuniform Pseudospectral Time-Domain Algorithm," <i>Microwave and Optical Technology Letters</i> , vol. 28, no. 6 (March 2001).	

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